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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,276	07/31/2000	Hiroyuki Miyoshi	9369-50(T37-124477M/TH)	4209

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PHILADELPHIA, PA 19103-7013

EXAMINER

BRAHAN, THOMAS J

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/629,276

Applicant(s)

MIYOSHI ET AL.

Examiner

Thomas J. Brahan

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Appropriate correction is required. The limitation of new claim 9 is not discussed in the specification. It is also not apparent in the drawings.

2. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.

3. Claims 1-7 and 9-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. In claim 1, it is unclear as to how the device is considered as having a driving section (line 4) as well as a drive assembly (line 8). It appears as though these are redundant recitations for the same element.
- b. It is unclear as to how the applicant is considering the brake assembly as overlapping the sheave, as recited in claim 9. The sheave is the output of the speed reducer, as to be located circumferential with respect to the speed reducer and to the brake.
- c. It is unclear as to how claim 13 can depend from claim 10, as lines 3 and 4, appear to repeat the limitations of claim 10.

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

5. Claims 1, 3, 5, 7, and 9, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 54-20547 in view of Heikkinen JP '547 shows the basic claimed combination of an actuating device including a sheave around which a rope engaged with an ascending and descending cage is wound, the sheave being adapted to move the rope with its rotation, and

a shielding body (3) for shielding the actuating device,

wherein the actuating device and the shielding body are installed on a rooftop of a building in which the ascending and descending cage is disposed, the shielding device being readily detachable from the rooftop (note mounting bolts 7).

JP '547 varies from the claims by not specifying that the actuating device includes a speed reducer and a brake assembly. However this is a common elevator actuating device arrangement. Heikkinen shows an elevator actuating device formed as a unit comprising a motor (1), a brake (6), and a speed reducer (5) inside a sheave (3). It would have been obvious to one of ordinary skill in the art to have the actuating device of the elevator of JP '547 formed as a single unit including the motor, brake, speed reducer, and sheave, for a compact construction, as taught by Heikkinen. The speed reducer and drive assembly of Heikkinen are arranged coaxially to one another, as recited in claim 3. The output of the speed reducer constitutes the sheave, with the speed reducer arranged radially inwardly of the sheave, as recited in claim 5. The speed reducer and drive assembly have a common shaft, as recited in claim 7. The brake assembly (6) overlaps the speed reducer (5), drive assembly (1), and the sheave (3), to the same degree as applicant's arrangement, as claim 9 is best understood.

6. Claims 1-3, 5, 7, and 9, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '547 in view of Mann et al. JP '547 shows the basic claimed combination of an elevator actuating device with a detachable shielding body (3; note mounting bolts 7). JP '547 varies from the claims by not specifying that the actuating device includes a speed reducer and a brake assembly. However this is a common elevator actuating device arrangement. Mann et al shows an elevator actuating

device formed as a unit comprising a motor (1), a brake (15), and a speed reducer (3) inside a sheave (57). It would have been obvious to one of ordinary skill in the art to have the actuating device of the elevator of JP '547 formed as a single unit including the motor, brake, speed reducer, and sheave, for a aligned integrated construction, as taught by Mann et al. Mann et al has a support member (at 16) with the speed reducer on one side, and the brake assembly and motor assembly on the opposite side, as recited in claim 2. The speed reducer and drive assembly of Mann et al are arranged coaxially to one another, as recited in claim 3. The output of the speed reducer constitutes the sheave, with the speed reducer arranged radially inwardly of the sheave, as recited in claim 5. The speed reducer and drive assembly have a common shaft, as recited in claim 7. The brake assembly (6) overlaps the speed reducer (5), drive assembly (1), and the sheave (3), to the same degree as applicant's arrangement, as claim 9 is best understood.

7. Claims 1, 2, and 6, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugita et al view of Hirano. Figure 2 of Sugita et al shows the basic claimed combination of an elevator actuating device including a drive assembly (11), brake () speed reducer gearing and a sheave (2) all enclosed, at least partially, in a shielding device which is detachable. It varies from the claims by not specifying that the device is mounted on the roof of the building. However mounting elevator motors in penthouses on the roofs of buildings is conventional in the art. Hirano shows a similar elevator actuating device and teaches mounting it in the penthouse of its building, see column 1, lines 16-21. It would have been obvious to one of ordinary skill in the art to mount the elevator of Sugita et al in a penthouse structure of its building, as to have access to the machinery from the rooftop, as suggested and rendered obvious by Hirano. Sugita et al has its drive assembly (11) and brake (26) mounted to one side of overall actuating device as to be on one side of a supporting member, and has its speed reducer mounted on the other side of the overall actuating device and the supporting member, as recited in claim 2. The supporting member of Sugita et al has lower mounting attachments, as to have it attached to an upper surface of the roof top when located in a penthouse, as recited in claim 6.

8. Claims 1, 3, 5-7, and 9, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wittur view of Hagg. Wittur discloses an elevator actuating device including a drive assembly (2), a brake (18, 25, 27, 30, or 32), a speed reducer (3), and a sheave (6) all enclosed in a detachable shielding device (15, 16, and the motor casing; note column 2, lines 49-53, states that the

housing portions can be of closed design). It varies from the claims by not specifying that the actuating device is mounted on the roof of the building. However mounting elevator motors in penthouses on the roofs of buildings is conventional in the art. Hagg shows a similar elevator actuating device and teaches mounting it in the penthouse of its building, see column 3, lines 15-27. It would have been obvious to one of ordinary skill in the art to mount the elevator drive of Wittur in a penthouse structure of its building, as to have access to the machinery from the rooftop, as suggested and rendered obvious by Hagg. Wittur has its speed reducer and brake arranged coaxially, as recited in claim 3. The output of the speed reducer is the sheave, as recited in claim 5. The supporting member of Wittur has lower mounting attachments, as to have it attached to an upper surface of the roof top when located in a penthouse, as recited in claim 6. The speed reducer and the drive assembly are mounted have a common input shaft, as recited in claim 7. The brake assembly (27) overlaps the speed reducer, drive assembly and the sheave, as claim 9 is best understood.

9. Claims 2, 4, 10, 12, 13, and 15, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wittur view of Hagg, as applied above to claim 1, and further in view of Fischer. Wittur, as modified, shows the basic claimed elevator actuating device, but varies from claim 2 by not having its brake arranged on the same side as the drive assembly. It varies from claim 10 by not having the motor formed as rotor mounted on a rotary disc with external magnets adjacent a radially arranged stator. Fischer shows a drive arrangement for an elevator with an embodiment in figure 2 which has permanent magnets (16) mounted on a rotary disc with a radially arranged stator (18). Its drum brake (10) is mounted on the drive assembly side of the mountings. The advantages of this arrangement are discussed in the first full paragraph of column 3. It would have been obvious to one of ordinary skill in the art to modify the elevator drive of Wittur by forming its motor as a disc with an outer surface of permanent magnets and an outer stator and with an adjacent brake, as to have a compact mounting arrangement, as taught by Fischer. The brake of Fischer is arranged radially inwardly of the drive assembly, as recited in claim 4, and coaxially with the drive assembly, as recited in claims 12 and 15. Wittur has a supporting member (at 11) which would face the disc carrying the rotor, as claim 13 is best understood.

10. Claims 10, 12, 13, and 15, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '547 view of Mann et al, as applied above to claim 1, and further in view of Fischer. JP '547, as modified, shows the basic claimed elevator actuating device, but varies from claim 10 by not

having the motor formed as rotor mounted on a rotary disc with external magnets adjacent a radially arranged stator. Fischer shows a drive arrangement for an elevator with an embodiment in figure 2 which has permanent magnets (16) mounted on a rotary disc with a radially arranged stator (18). The advantages of this arrangement are discussed in the first full paragraph of column 3. It would have been obvious to one of ordinary skill in the art to modify the elevator drive of Mann et al by forming its motor as a disc with an outer surface of permanent magnets and an outer stator, as to have a compact mounting arrangement, as taught by Fischer. The brake of Mann et al is arranged coaxially with the drive assembly, as recited in claims 12 and 15. Mann et al has a supporting member (the entire brake housing) which would face the disc carrying the rotor, as claim 13 is best understood.


11. Claims 11 and 14, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wittur view of Hagg and Fischer, as applied above to claims 10 and 13, and further in view of Fargo. Wittur, as modified, shows the basic claimed elevator actuating device, but varies from the claims by not having a motor encoder. Fargo shows a similar elevator actuating devices with motor encoder (534). It would have been obvious to one of ordinary skill in the art to modify the elevator drive of Wittur by providing its rotor with an encoder for controlling the position of the drive assembly, as taught by Fargo.

12. Garrido et al and Randazzo et al are cited as showing elevator actuating arrangements with shielding housings.

13. Applicant's remarks in the amendment filed June 12, 2003 have been considered, but are deemed moot in view of the above new rejections. The amendment necessitated the new ground of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. An inquiry concerning this action should be directed to Examiner Thomas J. Brahan at telephone number (703) 308-2568 on Mondays through Fridays from 9:30-7:00 EST. The examiner's supervisor, Ms. Eileen Lillis, can be reached at (703) 308-3248. The fax number for the USPTO is (703) 872-9306.

 10/12/03
THOMAS J. BRAHAN
PRIMARY EXAMINER